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ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 09/825,708 04/04/2001 Tracy D. Mallory 42137/RJP/E264 3105 **EXAMINER** 23363 7590 01/25/2006 CHRISTIE, PARKER & HALE, LLP DAVIS, CYNTHIA L PO BOX 7068 ART UNIT PAPER NUMBER PASADENA, CA 91109-7068 2665

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/825,708	MALLORY, TRACY D.
	Examiner	Art Unit
	Cynthia L. Davis	2665
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status `		
1) Responsive to communication(s) filed on 14 November 2005.		
2a) ☐ This action is FINAL . 2b) ☑ This	s action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
 4) Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 1-15 is/are allowed. 6) Claim(s) 16-21 is/are rejected. 7) Claim(s) 22 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 		
Application Papers		
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)	_	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed regarding claims 16 and 18-21 have been fully considered but they are not persuasive.

Regarding claim 16, in the Newton's Telecomm Dictionary definition which is cited in applicant's argument, the frame format is defined as also being known as a data packet. In another Cain reference (6606325), which is by the same inventor as the primary reference, in column 1, lines 33-37, it is stated that protocol messages may also be referred to as packets. Hence, the protocol messages of Cain (6697325) are equivalent to packets, which are equivalent to frames. The 102 rejection of the claim over Cain (6697325) is valid.

Regarding claim 18, the stations make some operational decisions (updating the paths) without further input from the other stations. The claim language does not require that all operational decisions be made without further input.

Regarding claim 19, the frames are sent when there is a failure, which is a change in status. The language of the claim is in the alternative, and does not require that the reference contain both sending once per minute and upon a change in status.

Regarding claim 20, the system described in Yoshiyama sends the message to each of the slave nodes in descending order of priority to obtain information about all of the slave nodes. To obtain such information regarding all the nodes, it would be important to ensure that the message was received by all the stations on the network.

Application/Control Number: 09/825,708

Art Unit: 2665

Regarding claim 21, sending control messages on a fast path, which bypasses processing, indicates that they are highest priority.

2. Applicant's arguments with respect to the rejection(s) of claim(s) 17 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Elzur reference.

Claim Rejections - 35 USC § 102

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. Claims 16 and 18-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Cain (6697325).

Regarding claim 16, a method of sharing information among a plurality stations on a communications network, each of the plurality of stations being capable of transmitting and receiving frames over the communications network between any one station and all other stations, comprising periodically broadcasting by one station to all other stations capabilities and status announcements sent in control frames is disclosed in Cain (6697325), column 1, lines 30-33 (each node periodically sends out status information to all of the other nodes).

Regarding claim 18, stations receiving the control frames make operational decisions based upon the agreed-upon flags without further interaction amongst the stations on the communications network is disclosed in Cain, column 1, lines 36-40 (the stations determine the routes without any further input from the other stations)

Application/Control Number: 09/825,708 Page 4

Art Unit: 2665

Regarding claim 19, the control frame being transmitted by a station once per minute or upon a change in current status of the station is disclosed in column 5, lines 7-13 of Cain (a message is sent when a link fails, which is a change of status).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cain (6697325) in view of Elzur.

Regarding claim 17, the control frame including status flags determinative of one or more of: a version of protocol under which the communications network is operating, optional feature support, link-layer priority usage, and network configuration commands is missing from Cain. However, Elzur discloses in column 2, lines 18-33, that the TCP protocol may include a status flag field in the header of a packet (frame), which may indicate acknowledgement information, which would be a supported optional feature. It would have been obvious to one skilled in the art at the time of the invention to use the TCP packets of Elzur in the system of Cain. The motivation would be to use a type of packet that is used in a well-known protocol (TCP).

5. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cain (6697325) in view of Yoshiyama.

Regarding claim 20, a second copy of a most recent control frame being transmitted by a station at a randomly selected interval after a control frame is sent by the station announcing a status change is missing from Cain. However, Yoshiyama discloses in column 2, lines 9-13, nodes sending out multiple copies of command messages. It would have been obvious to one skilled in the art at the time of the invention to have the station send out a second copy of the control frame. The motivation would be to ensure that it was received by all stations on the network.

1. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cain (6697325) in view of Cain (6606325).

Regarding claim 21, the control frame being sent at a highest link layer protocol priority is missing from Cain (6697325). However, Cain (6606325) discloses in column 2, lines 37-43, LSA messages being sent over a special fast path. It would have been obvious to one skilled in the art to send the messages containing the status information at a higher priority than normal traffic. The motivation would be to ensure that the status information is received by the other stations.

Allowable Subject Matter

- 6. Claims 1-15 are allowed.
- 7. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Application/Control Number: 09/825,708 Page 6

Art Unit: 2665

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD 1/19/2005

SUPERVISORY PATENT EXAMINE

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